COLUMBIA RIVER REGIONAL FORUM TECHNICAL MANAGEMENT TEAM

March 28, 2007 Meeting

FACILITATOR'S SUMMARY NOTES ON FUTURE ACTIONS

Facilitator: Robin Harkless Notes: Erin Halton

The following notes are a summary of issues that are intended to point out future actions or issues that may need further discussion at upcoming meetings. These notes are not intended to be the "record" of the meeting, only a reminder for TMT members.

Changes to the 3.14.07 TMT Meeting Minutes

Kyle Dittmer, CRITFC, noted a mis-spelling of Brian Marotz's last name, at the bottom of the last page of the official meeting minutes.

Action: Jim Adams, COE, said he would correct the spelling in the posted version of the notes.

Priest Rapids Operations Update

Russell Langshaw, Grant County PUD, updated TMT on Priest Rapids operations. The information was linked to the TMT agenda. He reported that there had not been a drop below the 70 kcfs critical elevation, and that the temperature units were at 955, signifying that the start of emergence and 'rearing' flow bands will occur sometime between April 2-4th.

Snake River/McNary Unit Outages and Items

Unit Outages: Don Faulkner, COE, reported on fire protection outages on Snake River projects and Faulkner clarified that there would be only one outage per project at a time during the spring season, that there would be addition al outages later in the summer and that the outage at Little Goose is scheduled for April. Faulkner said that he was working on including the outages in the Fish Passage Plan.

Lower Monumental RSW: Bernard Klatte, COE, said that the Lower Monumental RSW would not be installed this year, however as discussed at the SCT March meeting, the completion of the bracket installation was a high priority. FPOM also agreed that this work should be completed as soon as possible. COE requested spill bays 5-8 and unit 6 tagged out of service from March 30th – April 13th to install brackets at the projects. Unit 5 will be tagged out of service during the daytime and available at night after work is completed for the day. Klatte noted that this is the safest operation possible. Klatte asked for concurrence from TMT members present at the meeting: NOAA, USFWS, BOR, BPA, ID, CRITFC all approved.

McNary Spill Outages: Klatte said that there would be a dive in the McNary forebay and stilling basin in preparation for TSW installation at spill bay 22. This work, followed by balloon tag tests, is scheduled for before the spill season.

Little Goose Outages: Don also referred TMT members to a picture of damaged mounts from the upstream gate at Little Goose, posted to the TMT website. Contract work to fix the problem, requiring a unit outage, is scheduled to be completed by end of April and before transport season begins.

MOP Operations: Cathy Hlebechuk, COE, said that all 4 projects would be operating under MOP/MOP+1 by April 3rd, subject to navigational issues. Tony Norris added that BPA would do its best to operate from the 'top down', and stagger the start of MOP while also balancing higher flows and seasonal maintenance work. The COE complimented the good job BPA has done in balancing all the various operations.

Spring Spill/Transport Operations

Rudd Turner, COE, presented the draft Fish Operations Plan, posted on the TMT website. Turner described the document as a 'heads up' on how the COE plans to implement the "Agreement Regarding 2007 FCRPS Fish Operations", signed by the four Columbia River Tribes, the Colville Tribe and BPA, to manage spill/transport. Although not court ordered this year, he said the Fish Operations Plan was similar to the COE's 2006 Fish Passage Plan in response to last year's court order, which detailed conditions and descriptions of implementation. Turner said the document would likely be finalized by the end of the week, and Bernard Klatte, COE, said that he would be folding the FOP into the spring/summer update to the Water Management Plan. Turner said that Table 3 in the document is new, showing spill way operations. The plan provides explanations of variations in minimum generation possibilities. The document also includes description of spill levels for each project and changes and impacts for research projects and transportation program operations. Turner said that transport criteria for start dates and trigger days will be provided to TMT in the next couple of weeks – Paul Ocker is the COE contact. Turner noted the included reference to emergency protocol language in the FOP, and he added that reporting will be provided similar to last year, with COE RCC in the lead. Page 24 of the document includes links to the COE's website, where more information on spill, flow and water quality data can be found. Jim Adams, COE, suggested that graphs of spill patterns for Bonneville in the FOP could be added to the Fish Passage Plan, for better streamlining. Turner said that the 'research driven' sections of the document include the following possible modifications for Bonneville summer operations:

- the 75 kcfs per day spill in the Agreement may move up to 80-83 kcfs,
- potentially reducing the night spill caps,
- the summer start date at Bonneville might be moved to the 21st of June.

Turner added that the document includes a provision for the Salmon Managers to call on dates for nighttime spill to the cap at Little Goose, for 14 nights between April 22nd- May 15th. BPA added their preference to give at least 2 days notice for this operation.

Paul Wagner, NOAA, said that transport, starting between April 20th – May 1, will likely be recommended to start closer to May 1. Russ Kiefer, ID, suggested that if flows are less than 70 kcfs and we initiate Lower Granite transportation on April 20th, we should still stagger the dates for starting transportation from Little Goose and Lower Monumental

dams. The studies that show earlier migrating fish do better when bypassed at Lower Granite, also show lower SARS for fish bypassed at Lower Granite dam and then transported from a lower dam. TMT members also expressed the desire to have a better predictive tool than flow/temperature for determining when it is better to start transporting the collected fish, and support looking at ocean productivity shifts as the predictive tool.

Action/Next Steps:

- Spill/transport at Little Goose and criteria for spill will be on the agenda for the 4/4 TMT meeting.
- Rudd Turner, COE, will add Bonneville spill graphs from the FOP as an appendix to the FPP this will be posted to the TMT website, for TMT reference, by the week of 4/2. Turner will also share the ideas shared today at TMT with Paul Ocker.
- Bernard Klatte, COE, will add the FOP into the spring summer update to the Water Management Plan, as an appendix.

SOR #2007-4

Paul Wagner, speaking on behalf of the Salmon Managers, presented an SOR linked to the TMT website that requests conservative operation of Dworshak flows, in the interest of achieving elevation targets later in the year. Cathy Hlebechuk, COE, presented Dworshak ESP whiskers plot, inflows, and COE scenarios, also posted to the TMT website. She clarified that the whiskers plot does not capture the extreme event (i.e. Libby 2006), and that it was the most recent information available -updated as of 3/21. Hlebechuk noted that of the two scenarios, scenario 2 presented a more gradual, 'stair-step' operation through the end of June, and that the COE planned to operate within 'reasonable risk', with lower flows for the first half of April and in the interest of avoiding TDG exceedances of 110% during the spring run. Salmon Managers present at the meeting said that they preferred saving higher flows until later in the season, to the extent possible, and BPA said it would like to avoid excessive spill. TMT members present at the meeting: BOR, USFWS, ID, BPA and CRITFC did not object to the proposed operation at this point.

<u>Action /Next Steps:</u> COE will operate Dworshak's big unit at or near 4.5 kcfs outflows, beginning 4/2. Salmon Managers will discuss their preferences at the 4/3 FPAC meeting, and will share their recommendations at the 4/4 TMT meeting.

Chum Emergence Report

Rick Kruger, OR, referred TMT to the table and graph posted on the TMT website, showing 1999-2007 chum emergence dates and observed counts near Ives Island. Paul Wagner, NOAA, observed that the chum seem to be running ahead of predictions this year.

Libby Operations

Paul Koski, COE, presented tools the COE has developed for operating Libby during the spring/summer season, posted on the TMT website. Calculations for VARQ start dates and sturgeon flows are included, as are tables showing average Libby flows, elevations, and mean/median volumes. Cathy Hlebechuk, COE, reminded TMT that this ESP tool does not capture the case of the extreme event. (A question was raised about the start of sturgeon pulse, which will be no sooner than May 15. The temperature target was changed from 9 degrees C to 8 degrees C this year, per discussions by the group looking at this year' pulse) Koski also showed a whiskers plot and ESP hydrograph, which showed average and forecasted flows lined up.

Estimated Seasonal Average Flows

Estimated seasonal average flows were also posted to the TMT website: Lower Granite's ESP spring mean is 85-86 kcfs, and the summer mean is 34 kcfs. Lower Granite spring STP is 84 kcfs, with a 90 kcfs estimated objective. McNary's spring STP mean is 266 kcfs, with an estimated 248 kcfs objective.

Action/Next Steps: Hlebechuk encouraged TMT members to let the COE know what would be helpful to add to the new products; Koski said that he planned to create a graph that also includes outflows, and Paul Wagner, NOAA, suggested the addition of Priest Rapids data. Regarding the format of the graphs, TMT members appreciated the display of ranges and suggested label points to help clarification. Updated forecasts will be on the agenda for the 4/4 TMT meeting, with the most recent data available.

Water Management Plan Spring/Summer Update

Bernard Klatte, COE, said that the draft spring summer update to the WMP was posted on the TMT website.

<u>Action:</u> Klatte asked TMT members to submit their comments by 4/16, so that an inclusive update may be provided to IT at their 5/3 meeting.

Operations Review

Reservoirs – Grand Coulee was at 1271.6', and releasing to meet the end of March flood control elevation target of 1272.5' and the 4/10 target of 1259.2'. Hungry Horse was at 3535.7', releasing 5.2 kcfs to meet the end of March target of 3535.1' and 4/10 target of 3533.4'. Libby was at 2395.3', close to its end of March target elevation of 2395.5'. Dworshak was at 1560.3' and holding outflows at 10 kcfs until 4/2, when there will be a shift to 4.5 kcfs. Dworshak flows will be discussed by the Salmon Managers on 4/3 and by TMT at the 4/4 meeting. Dworshak flood controls are 1571.6' for 4/15 and 1555.5' for 4/30. Albeni Falls was at 2054.2' and spilling this week; Russ Kiefer and Idaho Regional Managers confirmed that exceeding a 2053' elevation is acceptable; the end of March/April target is 2056'. Ice Harbor outflows were at 65-70 kcfs, and Bonneville flows were at 250 kcfs.

Fish – Paul Wagner, NOAA, referred TMT to the Fish Passage Center website; yearling Chinook and steelhead are both running early, and Bonneville is seeing steady passage. Bernard Klatte, COE, directed TMT to the 'other fish related docs' link from the TMT

homepage for weekly status reports on sea lion activity below Bonneville: preliminary observations are showing a reduction in stellars.

Power – Tony Norris, BPA, reported that a downed CA line should be repaired soon, although it has had impacted Grand Coulee operations; the capacitor on the Franklin line out of Ice Harbor is also being repaired

Water quality – Jim Adams, COE, reported TDG exceedances at Lower Granite, Ice Harbor, McNary, John Day, and Bonneville.

Other – Dive surveys below corner collector at Bonneville removed old gauges, stilling basin, and concrete mattress – any relevant information from the dive surveys will be shared with TMT at an upcoming meeting or via email.

Next Meeting, April 4th, 9am-noon

Agenda items include:

- Priest Rapids Update
- Water Supply Forecasts Updated STP Models
- Little Goose Outages/Criteria for Spill
- MOP Operations Report
- Transport Operations for Research Studies
- Dworshak Operations
- WMP: Spring/Summer Update Comments due by 4/16
- Lower River Spill Start
- Operations Review

Columbia River Regional Forum Technical Management Team Meeting March 28, 2007

1. Welcome and Introductions

Today's TMT meeting was chaired by Cathy Hlebechuk and facilitated by Robin Harkless, with representatives from COE, USFWS, BPA, NOAA-F, BOR, and Idaho and Oregon attending in person or by phone. The following is a summary (not a verbatim transcript) of the topics discussed and decisions made at the meeting. Anyone with questions or comments about these notes should provide them to the TMT chair or bring them to the next meeting.

2. Review of Meeting Minutes

COE will correct the spelling of Brian Marotz's name on the March 14, 2007, official minutes.

3. Priest Rapids Update

It's been an uneventful two weeks, Russell Langshaw (Grant County PUD) said. The reservoir didn't drop below the critical level of 955 temperature units, which means emergence can be expected to start around April 2-4. That's when Grant County PUD will begin its "flow bands" to aid emergence.

4. Snake River/McNary Outages and Issues

A. Fire Protection Unit Outages. There will be times multiple units are out for scheduled maintenance, Don Faulkner (COE) said. The plan is to work on one unit at a time at dams along the Snake River throughout spring and summer, then take multiple units out late in the summer for replacement of carbon dioxide gas fire-suppression equipment. That could mean as many as four units out at a time for up to four weeks when flows are low.

Russ Kiefer (Idaho) asked, are you doing this type of work at Lower Granite during the spring season because there's already one unit out there, or will you wait until summer? There won't be any work at Lower Granite until July, then just one unit will be out of service, Faulkner said.

B. Lower Monumental RSW Construction Operations. This contract will be suspended on April 13 without the RSW being installed this spring, Bern Klatte said. The contractor still has some finishing work to do, and brackets to install. The work will entail taking spill bays 5-8 out of service starting March 30 and ending no later than April 13. Main units 6 will be out of service at the same time as the spillway outage. Unit 5 will also be tagged out of service during the daytime and available for operation during the night. Spill bays 1-4 will be

available for spill. USFWS, NOAA, BOR, BPA, CRITIFC and Idaho representatives all agreed to this timetable for the unit outages.

- **C. Mc Nary TSW Update.** Spill bay 22, which is closest to the powerhouse, has been selected to receive TSW 1, based on spill patterns analyzed at ERDC, Bernard Klatte (COE) said. After the TSW is installed, workers will start the next round of balloon tag testing.
- **D. Little Goose Navigation Lock Outage.** Don Faulkner (COE) showed the TMT photographs of damaged brackets at the Little Goose locks. The damaged equipment is being repaired under an emergency contract. Work will probably be completed by end April.
- **E. MOP Operations Update.** All four Snake projects will be at MOP (Minimum Operating Pool) beginning April 3rd subject to navigational issues, Cathy Hlebechuk said. The navigation issue normally surfaces in the summer when the flows drop and the 1 foot operating range may need to be elevated. For now, the plan is to start out with normal MOP operations. Hlebechuk asked what BPA's intentions are at getting down to MOP. Tony Norris (BPA) noted that BPA had to use the pools to store water to accomplish the low tailwater requirement below BON. There were also issues installing the Franklin line capacitor issue, plus having to spill a lot of water. Nevertheless, BPA will do its best to have all Snake River projects operating to within MOP by April 3, and know the Salmon managers have an interest in staggering the draft from top to bottom but it does not seem likely this year.

5. Spring Spill and Transport Operations

Rudd Turner (COE) gave an overview of the Fish Operations Plan, a COE document that focuses on spill and transport operations for the eight lower river dams this year. The FOP gives implementation details for parts of an agreement signed by BPA and five Tribes which was submitted to the court in January 2007. While COE did not sign the Agreement, General Martin signed a letter saying COE would implement Attachment 1 of the Agreement.

Attachment 1 of the Agreement outlines 2007 spill levels and describes transport strategies. The Fish Operations Plan was put together because all of this information was available in COE documents but dispersed among several documents, such as the Water Management Plan and the Fish Passage Plan.

The Fish Operations Plan includes sections on spring and summer operations for each project, transportation operations, spillway operations, and minimum generation. It includes a specific discharge rate for spillway operations, a new procedure this year. Turner distinguished between the gas cap (currently 115% in the forebay, 120% in the tailrace) and the spill cap (the discharge level that is set for each project each day in order to stay within the gas cap). In the

transportation section, there is no provision to stop spill at the Snake collector projects in low flow years. The salmon managers, using the TMT process, will be able to call for nighttime spill to the spill cap at Little Goose this spring.

The draft FOP also includes information on navigational safety, emergency protocols and reporting. There is a possibility that the Regional Forum will be asked to consider a proposal to increase Bonneville summer daytime spill from 75 kcfs as stipulated in the agreement to 81 or 83 kcfs, which could produce better spill patterns. There might be a nighttime spill level as well as daytime. Also, there's a possibility of moving the start date for summer spill at Bonneville up from July 1 to June 21. The FOP also includes a provision for spilling to the gas cap for up to 14 nights any time from April 22 to May 15 at Little Goose, with dates to be determined by the salmon managers to coincide with migration peaks for wild spring/summer Chinook. This will be a new function for TMT this year.

BPA will need a couple days' notice to coordinate spill requests on the Snake, Norris said. Two days' notice for 14 days of spill would work for CRITFC, Kyle Dittmer said. Russ Kiefer (Idaho) agreed that transport should begin sooner in low flow years; however, start dates should be staggered rather than starting on the same day at all 3 projects. Wagner stated that the out-migration doesn't start before about April 20, and a start date closer to May 1 would be preferred. This would allow more yearling Chinook to stay in-river while starting in time to transport most steelhead, which have a later passage peak than Chinook. Kiefer said that NOAA research results indicate that a start date closer to May 1 is better in terms of adult returns. The agreement says the salmon managers will call for it and utilize the TMT process. The TMT agreed to revisit this issue April 4 and possibly again on April 18 if necessary.

On a broader topic, "It helps to publish a schedule showing what dates projects will be under various study regimes", Paul Wagner (NOAA) said. The group discussed where would be the most logical place for that information. Publish any updates in documents that are open to revisions, such as the Water Management Plan, Scott Bettin (BPA) said.

6. Dworshak Operations – SOR#2007-04

Paul Wagner (NOAA) presented this SOR on behalf of some of the salmon managers. The intent of the SOR is similar to the one on Coulee operations: not getting too far ahead of the flow. The issue is the April 10 shifted flood control elevation at Dworshak. If the discharge level that was anticipated to meet the end of March flood control target is continued, it would likely result in not meeting the April 10 flood control elevation at that project.

Randy Wortman (COE) presented a whiskers plot containing 45 years (1949-1993) ESP data showing expectations in the range of flows, including averages and extremes computed separately for each year. A comparison to a hydrograph showing 45 years of data revealed close agreement between the ESP daily average and the STP hydrograph.

Kiefer asked, how much would the elevation in Dworshak increase per day with 5 kcfs/day being ponded? A little over half a foot since there is 15 or 16 kaf per foot, or 8 ksdf per foot, Cathy Hlebechuk (COE) said. She shared two charts showing possible operational scenarios for Dworshak. The volume in the first scenario was about the same as the March final forecast. Beginning with a shifted flood control elevation of 1,560.3 feet on March 31, it modeled minimum flow the first half of April to try to reach the shifted flood control elevation of 1571.8 feet and then released about 17 kcfs (over 110% TDG) for the last half of April to reach the end of April flood control elevation of 1555.4 feet. The second scenario, based on a lower water year (1951) (15 percent lower than the March final forecast), started at elevation 1,563 feet at end March, reduced to minimum flow the first half of April to get as close as possible to it's shifted mid-April flood control elevation and increased outflows to about 6 kcfs to reach the end of April flood control elevation.

CRITFC's concern is that we not overdraft the reservoir early, then miss the April 10 target for fish flows, Kyle Dittmer said. We can't go above the shifted flood control elevation of 1,560.3 feet because that's the local flood control protection level, Hlebechuk said. She asked the salmon managers, do you want to try to reach the April 10 target elevation by going to lower flows the first half of April, or would you rather see higher flows at the end of April?

NOAA, USFWS, Idaho, CRITFC, BOR and BPA preferred lower flows for the first half of April, reaching the April 10 target if possible, then higher flows for the last half of the month. They recommended a flow of 4 to 5 kcfs between April 2 and 4 when the next TMT meeting is to occur. They recommended higher than minimum flow to reduce the possibility of exceeding the gas cap later in the month and acknowledged the higher flow might impact the ability to reach April 10 flood control elevation. The COE will move forward with its plan to begin operating the big unit at Dworshak on April 1 at around 4.5 kcfs, Hlebechuk said. On April 3, the salmon managers will meet at FPAC to consider the possibility of making recommendations for the Action Agencies to consider regarding April operations, while keeping in mind the 110% gas cap and BPA's and the Salmon Manager's desire to avoid exceeding the 110% gas cap.

7. Chum Emergence

Rick Kruger (Oregon) presented a table and graph, both of which are linked to today's agenda on the TMT website, and asked for questions (there were none). It appears the observed emergence is running ahead of predictions,

Wagner said. It's possible there are lots more chum around, but we can't catch them because tailwater elevations are higher that expected, Kruger said.

8. Libby Operations

Paul Koski (COE) presented an operations summary and ESP inflow graph. The main idea was to use ESP traces for all 45 years to create a tool that will calculate VARQ flows and the sturgeon pulse for each year independently. The table assumes a starting elevation of 2,395.5 feet on March 31, the flood control elevation based on the March final forecast.

The table shows VARQ flows starting April 19 on average, with an average maximum elevation of 2,451 feet (8 feet from full) for all 45 years. The mean volume for ESP years is 7,327 kaf and the median volume is 7,215 kaf. In 5 of the 45 years, the reservoir refilled completely. The median elevation for the end of June was 2,441.2 feet. Koski emphasized that this table is just one example of what COE can do in terms of organizing information for the Regional Forum to use in its decision making process.

9. Estimated Seasonal Average Flows

Koski presented a graph summing up spring and summer flows on the Snake River for all 45 years on record. For spring flows, the median was 85-86 kcfs, with a high of 120 kcfs and a low of 65 kcfs. For summer flows, the median was around 34 kcfs. Using the March final forecast, the Lower Granite spring discharge objective would be 90 kcfs, the summer objective 51.6 kcfs.

Hlebechuk said the spring flow objective for McNary, based on the March final forecast is 248 kcfs, and the average from this week's STP is 248 kcfs. She also said the STP showed an average spring flow at Lower Granite of 84 kcfs.

COE is experimenting with products for TMT, so ask for what you need, Hlebechuk said. Include the 135 kcfs objective for Priest Rapids flow in subsequent products, Wagner said. We can create these graphs weekly when we get new ESP data, Koski said. For every TMT meeting, we will be working with the previous week's ESP data for that presentation, Wortman said.

10. Draft Water Management Plan Spring/Summer Update

The draft WMP spring/summer update is posted for review and comments, Klatte said. COE will add to it, incorporating the Fish Operations Plan and spill patterns. The IT will receive the draft at its May 3 meeting. Klatte asked for comments from IT members and/or their TMT representatives. Comments will be posted to the TMT website for other TMT members to review.

11. Operations Review

Operations Review

A. Reservoirs. Grand Coulee is at elevation 1,271.6 feet, operating for shifted flood control elevation and the April 10 target elevation of 1,259.2 feet, John Roache (BOR) said. The April 10 target discharge volume is 59.2 kcfs.

<u>Hungry Horse</u> is at 3,535.7 feet elevation, discharging about 5.2 kcfs and moving toward the shifted flood control elevation of 3,535.1 feet. Inflows are coming down, and BOR is starting to draft, Roache said. The April 10 flood control elevation target is 3533.4 feet.

<u>Libby</u> is at elevation 2,395 feet, with an end of March flood control elevation of 2,395.5 feet. The project is releasing 15 kcfs and trying to pass inflows, Hlebechuk said.

<u>Dworshak</u> is at elevation 1.560.3 feet, the end of March flood control elevation, also trying to pass inflows. COE is planning to operate only the one big unit most efficiently as requested, and will wait for the next water supply forecast on April 2 or 3 and possibly the next TMT meeting on April 4 before making any operational changes. The April 15 flood control elevation is 1,571.5 feet, and spill may be required to meet the end of April flood control elevation is 1,555.5 feet — 16 feet below current elevation.

<u>Ice Harbor</u> is running about 65-70 kcfs of inflows. <u>Bonneville</u> has been discharging around 250 kcfs.

B. Fish. Movement this year on the Salmon River is earlier than typical, Paul Wagner (NOAA) said. The same is true of the Imnaha and Grande Ronde rivers. The migration of subyearling spring Chinook has been trailing off at Bonneville Dam following the Spring Creek release. There has been lots of steelhead activity in the Lower Granite area, which usually happens later than Chinook migrations. It's too early for any adult action.

Bernard Klatte (COE) will post weekly sea lion hazing reports to the TMT homepage under the "Other Fish Related Documents" link. http://www.nwd-wc.usace.army.mil/tmt/documents/fish/2007/sea_lion_hazing.html The predation count so far this year is 217 salmon and steelhead and 353 sturgeon seen taken by the observers. While sea lions are spread out through the entire estuary, their diet is more varied downstream, and it's in the Bonneville Dam area where they're feeding more on listed species. The hazing reports will account for only sea lions in the Bonneville tailwater and ¼ mile downstream.

C. Power. Everything is looking good, except a powerline failure in California has affected BPA's ability to lower the elevation at Grand Coulee and move generation out of the region, Tony Norris (BPA) said. Capacitor work on

the Franklin line is proceeding, and there are two units running at Ice Harbor now, so Franklin is not a problem.

D. Water Quality. Because most projects are spilling, we're seeing elevated gas levels over 110% in a number of tailwaters, including Lower Granite, Jim Adams (COE) said. Ice Harbor is pushing 114%, McNary is ranging around 110-113%, . Bonneville is around 111-112%, and John Day is under 110%, as is The Dalles. Albeni Falls is spilling 15-22 kcfs, but the TDG levels won't be known until a gage is installed and operating.

9. Next TMT Meeting

The next meeting is scheduled for April 4, 2007. Agenda items will include a Priest Rapids update, the new water supply forecast, updated STP models, the Little Goose outage, spring spill and transport operations, a MOP operations follow-up, the Dworshak water supply forecast, the draft WMP spring/summer update, setting criteria for 14 days of spill at Little Goose and Lower Granite, and the usual operations review. This meeting summary was prepared by Pat Vivian.

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Jim Adams	COE
Paul Wagner	NMFS
David Wills	USFWS
John Roache	BOR

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